



## OTIS 012-C CARBON REMOVER

May be used to comply with OSHA's Hazard Communication Standard 29CFR 1910. 1200. Standard must be consulted for specific requirements.

### **SECTION 1 - IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND COMPANY**

**Trade Name:** Bore Tech C4 Carbon Remover

**Application of the substance / preparation:** Cleaning Compound

#### **Details of the supplier Information:**

**Supplier Name:** Otis Products, Inc  
**Address:** PO Box 852, 6987 Laura Street; Lyons Falls, NY 13368  
**Phone:** 315-348-4300  
**Fax:** 315-348-4332

**Emergency Telephone No.:** CHEM-TREC 1-800-424-9300

### **SECTION 2 – HAZARDS IDENTIFICATION**

#### **Classification of the substance or mixture**

**Classification according to Regulation (EC) No1272/2008**



GHS07

|               |           |  |
|---------------|-----------|--|
| Skin Irrit. 2 | H315      | Causes skin irritation   |
| STOT SE 3     | H335-H336 | May cause respiratory irritation. May cause drowsiness or dizziness. |

**Classification according to Directive 67/548/EEC or Directive 1999/45/EC:**



Xi; Irritant  
R36/37/38

The full text for all risk phrases is displayed in Section 16

#### **Information concerning particular hazards for human environment:**

The product has to be labeled due to the calculation procedure of the "General Classification guideline for the preparations of the EU" in the latest valid version.

#### **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

#### **Labeling according to EU guidelines:**

Observe the general safety regulations when handling chemicals

The product has been classified and marked in accordance with EU directives / Ordinance on Hazardous Materials.



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**Code letter and hazard designation of product:** Not applicable

**Hazard-determining components of labeling:** Not applicable

**Risk phrases:**

R36/37/38 Irritating to eyes/respiratory system/skin

**Safety phrases:**

1/2 Keep locked up and out of the reach of children  
26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice  
36/37/39 Wear suitable protective clothing, gloves and eye / face protection  
45 in case of accident or if you feel unwell, seek medical advice immediately

### **SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

| Dangerous Components                |  |  |        |
|-------------------------------------|--|--|--------|
| CAS: 141-43-5<br>EINECS: 205-483-3  | Monoethanolamine                       | C R34; XN R20/21/22<br>Skin Corr 1B, H314; Acute Tox 4, H302;<br>Acute Tox 4, H312; Acute Tox. 4, H332 | 3-<5%% |
| CAS: 7320-34-5<br>EINECS: 237-574-9 | Tetrapotassium<br>Pyrophosphate        | C;R37, Xn;R20/21/22  | 5-10%  |
| CAS: 112-35-5<br>EINECS: 203-961-6  | Diethylene Glycol<br>Monobutyl Ether   | C;R10, R20/21/38/43<br>otisgun\rgrunert  | 5-10%  |
| CAS: 5989-27-5<br>EINECS: 227-813-5 | 4-Isopropenyl-1-<br>methyl cyclohexane | C;R10, Xn;R20/21/38/43   | 1-5%   |

**Additional information:** For the wording of the listed risk phrases refer to section 16

### **SECTION 4 – FIRST AID MEASURES**

**GENERAL INFORMATION**

Keep the affected person warm and at rest. Get prompt medical attention.

**INHALATION**

Move the exposed person to fresh air at once  
Perform artificial respiration if breathing has stopped.  
Keep the affected person warm and at rest.  
Get prompt medical attention.

**INGESTION**

NEVEN MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS!  
Drink plenty of water.  
DO NOT induce vomiting. Get medical attention immediately.



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### **SKIN CONTACT**

Generally the product does not irritate the skin.  
Remove affected person from source of contamination.  
Promptly flush contaminated skin with water.  
Promptly remove clothing if soaked through, flush the skin with water.  
Get medical attention if any discomfort continues.

### **EYE CONTACT**

Promptly wash eyes with plenty of water while lifting the eye lids.  
Continue to rinse for at least 15 minutes and get medical attention.  
Get medical attention immediately.  
Continue to rinse.

### **MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED**

Headache  
Coughing  
Allergic reactions  
Blurred vision

## **SECTION 5- FIRE FIGHTING DATA**

### **EXTINGUISHING MEDIA**

Fire can be extinguished using: Water spray, fog or mist. Alcohol resistant foam. Carbon dioxide(CO<sub>2</sub>). Dry chemicals, sand, dolomite etc.

### **SPECIAL FIRE FIGHTING PROCEDURES**

Keep run-off water out of sewers and water sources. Dike for water control. Cool containers exposed to flames with water until well after the fire is out. Move container from fire area if it can be done without risk. If risk of water pollution occurs, notify appropriate authorities. Beware, risk of formation of toxic and corrosive gases.

### **UNUSUAL FIRE & EXPLOSION HAZARDS**

Vapors are heavier than air and may spread near ground to sources of ignition.

### **SPECIFIC HAZARDS**

Fire creates: Ammonia or amines. Oxides of: Nitrogen, Carbon and phosphorous

### **REFERENCE TO OTHER SECTIONS**

See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See section 13 for disposal information.



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### **SECTION 6 – ACCIDENTAL RELEASE MEASURE**

#### **PERSONAL PRECAUTIONS**

Wear protective clothing as described in Section 8 of this safety data sheet.

#### **ENVIRONMENTAL PRECAUTIONS**

Prevent entry in drains. Avoid discharge onto the ground. Avoid release to the environment.

#### **SPILL CLEAN UP METHODS**

Stop leak if possible without risk. Ventilate well. Dilute with copious amount of water. Provide ventilation and confine spill. Do not allow runoff to sewer. Collect and reclaim or dispose in sealed containers in licensed waste. Avoid contact with skin or inhalation of spillage, dust or vapor. Clean-up personnel should use respiratory and/or liquid contact protection.

See section 13 for disposal information.

### **SECTION 7 – HANDLING AND STORAGE**

#### **PRECAUTIONS FOR SAFE HANDLING**

Store in cool, dry place in tightly closed receptacles  
Keep receptacles tightly sealed  
Keep away from heat, sparks and open flame

#### **REQUIRMENTS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES**

Store away from oxidizing agents  
Store away from reducing agents  
Unsuitable containers/metals: copper, zinc aluminum, alloy zinc, aluminum

#### **FURTHER INFORMATION ABOUT STORAGE CONDITIONS**

Protect from frost  
Keep from freezing  
Store under lock and key and out of the reach of children  
Keep container tightly sealed

### **SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

| Name                                    | Std | LT-ppm          | LT-mg/m3        | St - ppm        | ST – mg/m3      |
|---|-----|-----------------|-----------------|-----------------|-----------------|
| Monoethanolamine                        | OES | 3 ppm           | 7.6 mg/m3       | 6 ppm           | 15 mg/m3        |
| Tetrapotassium<br>Pyrophosphate         | OES | 10 ppm          | 25 mg/m3        | 15 ppm          | 38 mg/m3        |
| Diethylene Glycol<br>Monobutyl ether    | OES | 25 ppm          | 63 mg/m3        | 100 ppm         | 250 mg/m3       |
| 4-Isopropentyl-I-methyl-<br>cyclohexane | OES | Not established | Not established | Not established | Not established |

INGREDIENT COMMENTS: OES = Occupational Exposure Standard.



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### PROTECTIVE EQUIPMENT

Protective Gloves: Use impermeable gloves.

Eye Protection: Wear safety/splash goggles.

Respiratory Protection: Not normally required.

If working in confined area or if excessive misting is expected an approved organic vapor mask should be worn.

### PROCESS CONDITIONS

Use engineering controls to reduce air contamination to permissible exposure level.

Provide eyewash station.

### ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation

### RESPIRATORY EQUIPMENT

If ventilation is insufficient, suitable respiratory protection must be provided.

Chemical respirator with organic vapor cartridge.

### HAND PROTECTION

Use suitable protective gloves if risk of skin contact. Use protective gloves made of: Rubber, neoprene or PVC.

### EYE PROTECTION

Wear approved, tight fitting safety glasses where splashing is probable.

### OTHER PROTECTION

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapor contact.

### HYGIENE MEASURES

Do not smoke in work area.

Wash at the end of each work shift and before eating smoking and using the toilet.

Wash promptly if skin becomes wet or contaminated.

Promptly remove any clothing that becomes contaminated.

When using do not eat, drink or smoke.

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

|                    |   |
|--------------------|---|
| APPEARANCE         | Liquid Clear  |
| COLOUR             | Colorless Yellow  |
| pH                 | 10.4  |
| ODOUR              | Mild (or faint) citrus                                    |
| SOLUBILITY         | Completely soluble in water Soluble in Benzene Chloroform |
| BOLING POINT(°C)   | ~ 105°C @ 760 mm Hg                                       |
| MELTING POINT (°C) | ~10   |
| RELATIVE DENSITY   | 1.0   |
| VAPOUR DENSITY     | N/D   |
| VAPOUR PRESSURE    | N/D (air=1)   |
| EVAPORATION RATE   | N/D   |
| FLASH POINT (°c)   | > 110° C  |



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### **SECTION 10 – STABILITY AND REACTIVITY**

#### STABILITY

Stable under normal temperature conditions and recommended use.

#### CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition.

Avoid contact with acids and alkalies.

Avoid exposure to high temperatures.

### **SECTION 11 – TOXICOLOGICAL INFORMATION**

TOXIC DOSE 1-I<sub>d</sub> 50      2100 mg/kg (oral rat)

#### INHALATION

Prolonged inhalation of high concentrations may damage respiratory system.

Vapors may irritate respiratory system or lungs

#### INGESTION

Swallowing concentrated chemical may cause severe internal injury.

May cause chemical burns in mouth and throat.

May cause chemical burn in mouth, esophagus and stomach.

#### SKIN CONTACT

Strongly irritating.

Prolonged contact may cause skin sensitization

#### EYE CONTACT

Extreme irritation of eyes and mucous membranes, including burning.

Risk of damage to eyes.

#### HEALTH WARNINGS

Gas or vapors is toxic or extremely irritating even on brief exposure.

This chemical may cause skin/eye irritation and burns (corrosive).

Repeated exposure may cause chronic eye irritation.

Swallowing concentrated chemical may cause severe internal injury.

#### ROUTE OF ENTRY

Inhalation. Ingestion. Skin and/or Eye Contact

#### TARGET ORGANS

Eyes, Kidneys, Liver, Respiratory System, Lungs, Skin



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### MEDICAL SYMPTOMS

Extreme irritation of eyes and mucous membranes, including burning and tearing.  
Pharyngitis (inflammation of back of mouth).  
General respiratory distress, unproductive cough.  
Severe skin irritation.

### MEDICAL CONSIDERATIONS

Skin disorders and allergies.  
Splash in eye requires examination by eye specialist.

## **SECTION 12 – ECOLOGICAL INFORMATION**

LC 50, 96 Hrs, FISH mg/l      150 Rainbow Trout  
EC 50, 48 Hrs, DAPHNIA, mg/l    33

### MOBILITY

Dissolves in water

### BIOACCUMULATION

Does not bioaccumulate significantly

### DEGRADABILITY

Readily biodegradable

## **SECTION 13 – DISPOSAL CONSIDERATIONS**

### GENERAL INFORMATION

Contaminated packages must be completely emptied before sending away for laundering and re-use.

### DISPOSAL METHODS

Dispose of waste and residues in accordance with local authority requirements.  
Confirm disposal procedures with environmental engineer and local regulations.

## **SECTION 14 – TRANSPORT INFORMATION**

### **DOT Shipping Information**

This product is considered to be a non- hazardous material and not regulated by the D.O.T.

### **ADR, IMDG, IATA Shipping Information**

This material is considered non-hazardous

ADR, IMDG, IATA      Not applicable

UN PROPER SHIPPING NAME  
ADR, IMDG, IATA      Not applicable

|  |                |
|--|----------------|
| Transport Hazard Class(es)<br>ADR, IMDG, IATA  | Not applicable |
| Class<br>Label   | Not applicable |
| Packing group<br>ADR, IMDG, IATA   | Not applicable |
| Environmental Hazards:<br>Marine pollutant   | No             |
| Special precautions for users<br>Dander Code (Kemler):<br>EMS Number<br>Segregation groups:  | Not applicable |
| Transport in bulk according to Annex II of<br>MARPOL73/78 and the IBC Code<br>Transport/ Additional information<br>ADR<br>Limited quantities (LQ)<br>Transport category<br>Tunnel restriction code | Not applicable |
| UN "Model Regulation":   | Not applicable |

## **SECTION 15 – REGULATORY INFORMATION**

|          |  |
|----------|--|
| LABELING | non-hazardous mixture  |
| CONTAINS | Monoethanolamine<br>Tetrapotassium pyrophosphate<br>Diethylene glycol monobutyl ether<br>4-Isopropenyl-1-methyl, cyclohexane |

## **SECTION 16 – OTHER INFORMATION**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

|                  |  |
|------------------|--|
| Relevant phrases |  |
| R20/21/22        | Harmful by inhalation, in contact with the skin and if swallowed           |
| R36/37/38        | Irritating to eyes/respiratory system/skin                                 |
| R43              | May cause skin sensitization   |
| S45              | In case of accident or if you feel unwell, seek medical advice immediately |
| S51              | Use only in well-ventilated areas.   |





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S24/25 Avoid contact with skin and eyes.

### UK REGULATORY REFERENCES

Health and Safety at Work Act 1974.

The Control of Substances Hazardous to Health Regulations 1988.

Chemicals (Hazard Information & Packaging) Regulations.

### ENVIRONMENTAL LISTING

Environmental Protection Act 1990 Special Waste Regulations 1996

### EU DIRECTIVES

Dangerous Substance Directive 67/548/EEC.

Dangerous Preparations Directive 1994/45/EEC.

### APPROVED CODE OF PRACTICE

Safety Data Sheets for Substances and Preparations.

Classification and Labeling of Substances and Preparations Dangerous for Supply.

### GUIDANCE NOTES

Occupational Exposure Limits EH40.

REVISION DATE 11/16/12

REV. NO./REPL. SDS GENERATED ISSUE NO2

SAFETY DATA SHEET STATUS Approved

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